

two copies (maternal + paternal) of a
fragment with several polymorphisms

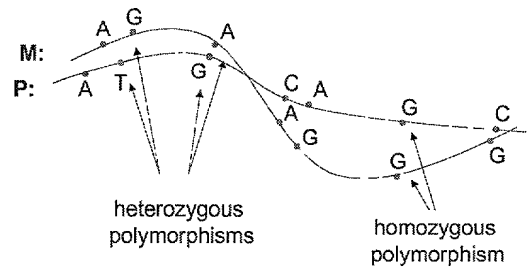
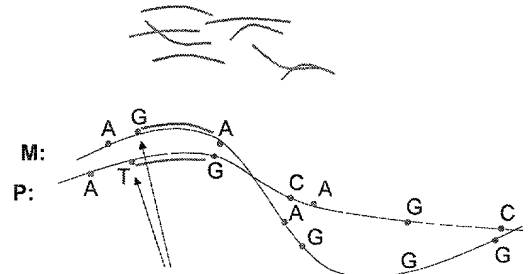


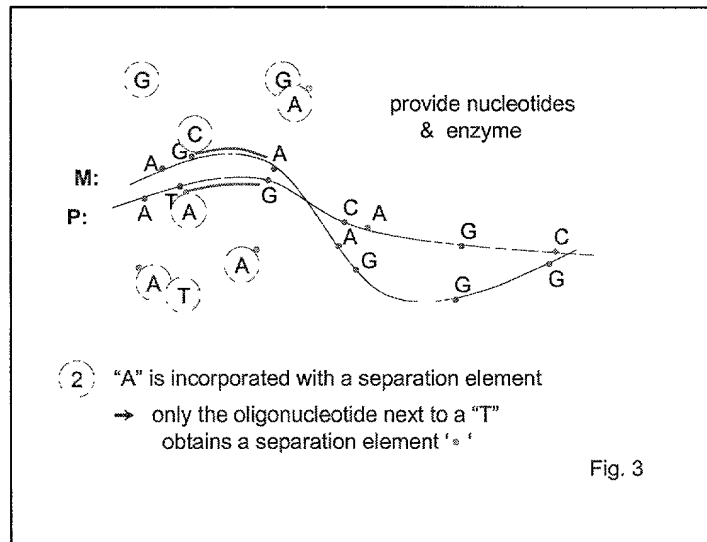
Fig. 1

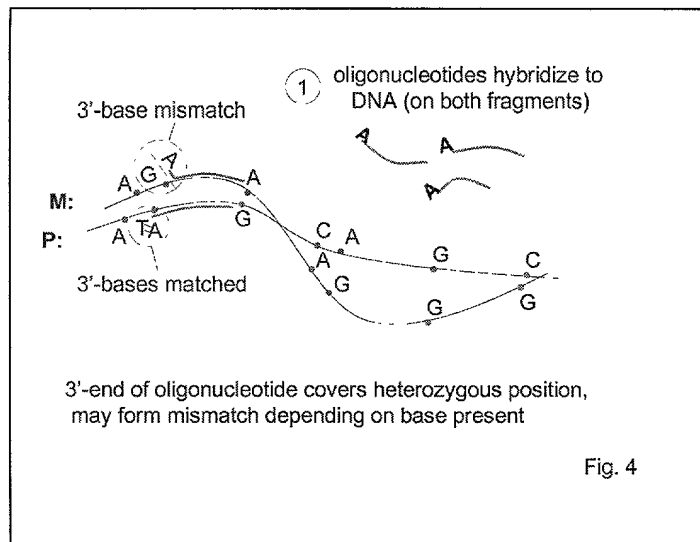
add oligonucleotides targeting a polymorphic site:



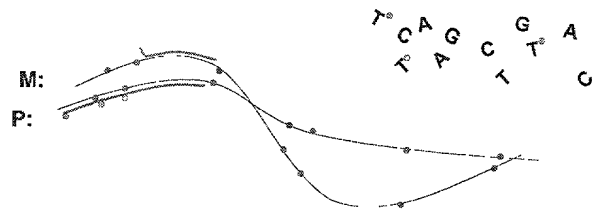
- 1 oligonucleotides hybridize next to a heterozygous site (on both fragments)

Fig. 2



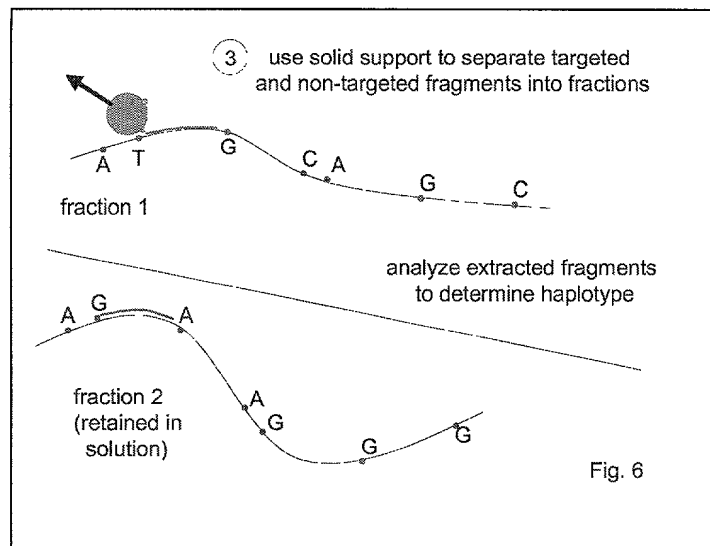


provide nucleotides, including modified ones with a separation element: 'e'



2 enzymatic elongation of oligonucleotide with separation element only if no mismatch present

Fig. 5



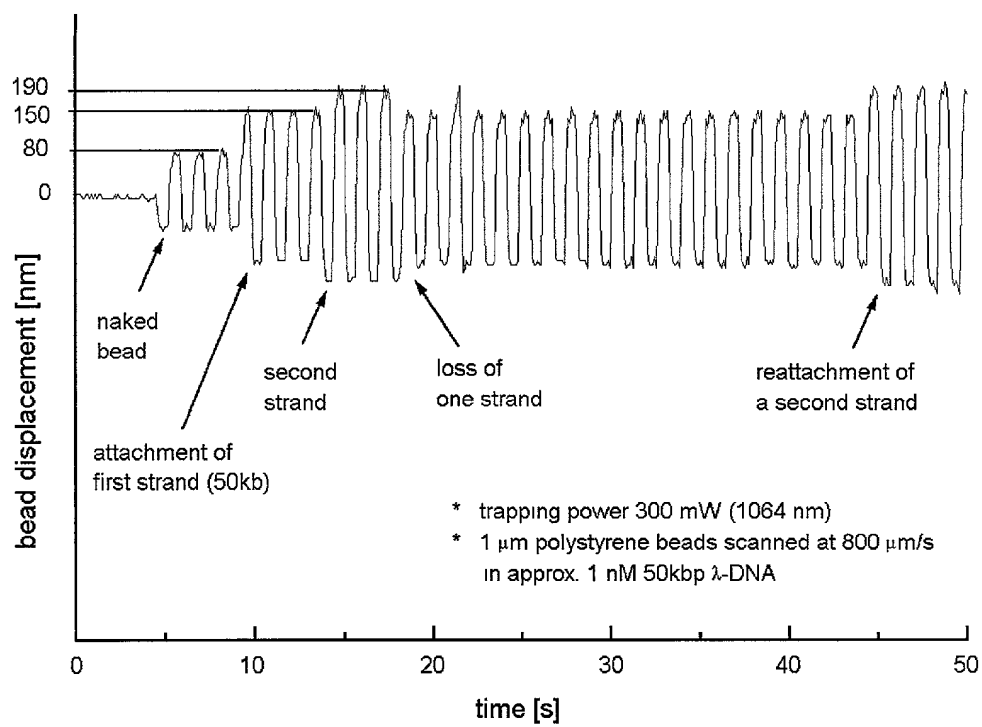


Fig. 7

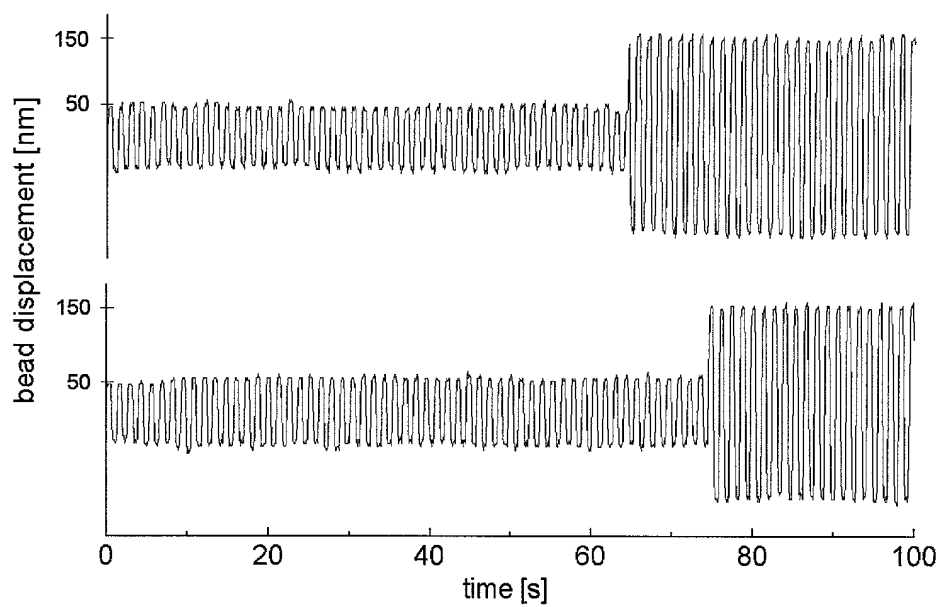
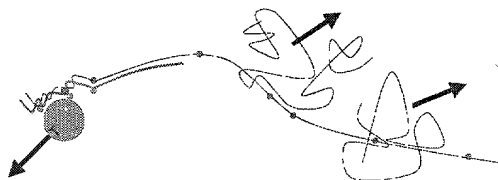


FIG. 8

- ③ extract targeted fragment through
separation element bound to solid support



multiple separation elements topologically
lock target fragment to solid support

Fig. 9

Multiplexing - first order:

different oligonucleotides extract different fragments
based on same type of polymorphism (here: "T")

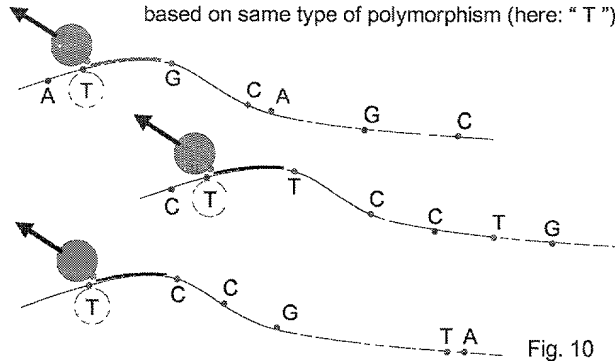
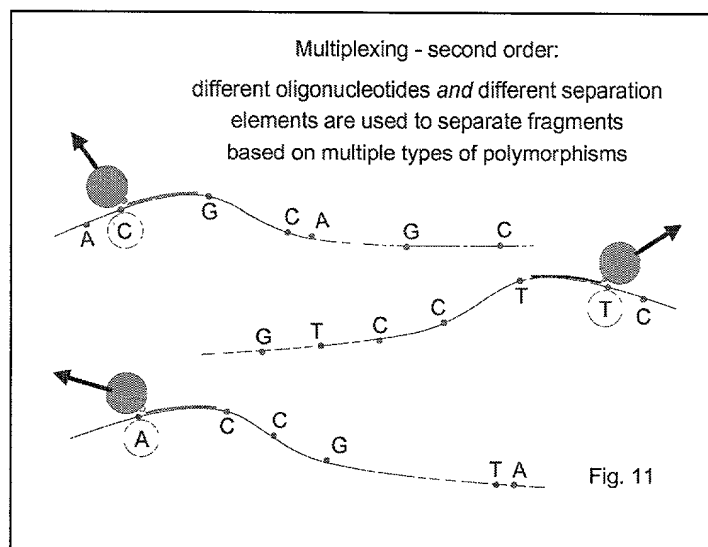


Fig. 10



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